



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,300	01/31/2002	Lorinda R. Opsahl-Ong	G04.017	2021

67338 7590 07/11/2008
BUCKLEY, MASCHOFF & TALWALKAR, LLC
GENERAL ELECTRIC COMPANY
50 LOCUST AVENUE
NEW CANAAN, CT 06840

EXAMINER

BARTLEY, KENNETH

ART UNIT	PAPER NUMBER
----------	--------------

3693

MAIL DATE	DELIVERY MODE
-----------	---------------

07/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/066,300

Applicant(s)

OPSAHL-ONG ET AL.

Examiner

KENNETH L. BARTLEY

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8, 9, 12-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 9, 12-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt of Applicant's amendment and response filed on May 5, 2008 is acknowledged.

Response to Amendment

2. Claims 1, 8-9, 16, and 19 are currently amended. Claims 6-7, 10-11, 15 and 20 have been canceled. Claims 1-5, 8-9, 12-14, and 16-19 are pending in the application and are provided to be examined upon their merits.

Response to Arguments

3. Applicant's arguments filed May 5, 2008 have been fully considered but they are not persuasive. The Examiner provides a response in **bold** below to Applicant's Remarks.

Applicant provides overview of 35 USC § 103(a) rejection beginning on page 8 of Remarks:

Claims 1 - 5, 7 - 14, and 16 - 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,823,319 to Lynch et al.(hereinafter, Lynch), in view of U.S. Publication No. 2002/0082903 A1 to Yasuzawa and in further view of Official Notice. This rejection is traversed.

Applicant notes that claim 1 relates to a method of generating return targets for potential real estate deals, the method including receiving prior real estate deal information from a prior deal data source; defining a rule-based pricing system based on an analysis of the received prior real estate deal information; determining a collateral type associated with a potential real estate deal; receiving supplemental deal information associated with the potential real estate deal; and automatically generating a base return target for the potential real estate deal based on applying the collateral

Application Serial No.: 10/066,300 Supplemental Amendment and Response to January 2, 2008 Non-Final Office Action

type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value. The claimed method further includes identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information; identifying a risk adder associated with the potential real estate deal based on the supplemental deal information; validating the rule-based system with additional prior real estate deal information; and automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule-based system. Claims 16 and 19 are worded similar to claim 1.

Applicant argues Lynch on page 9:

Applicant submits that the cited and relied upon Lyons fails to disclose or suggest the claimed aspects of, at least:

- receiving prior real estate deal information from a prior deal data source;
- defining a rule-based pricing system based on an analysis of the received prior real estate deal information;
- validating the rule-based system with additional prior real estate deal information; and
- automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule- based system.

The Examiner believes Applicant means Lynch and notes that the above are amended elements to the claims that Applicant is arguing. The Examiner provides additional response below to the amended features.

Applicant argues Lyons in detail, beginning bottom of page 9:

Applicant respectfully submits that Lyons fails to disclose receiving prior real estate deal information and defining a rule-based pricing system based on an analysis of the received prior real estate deal information. In contrast to the claims, the MSS rules 210 of Lyons are not disclosed as being based on any prior real estate deal information. The MSS rules include products exclusionary rules, pricing and risk rules, repair rules, edit preference rules, credit grading and credit transformation rules,

Art Unit: 3693

benefits rules, explanation rules, cross-selling rules, and stipulation rules. (See Lyons, col. 5, In. 1 - 67) None of these types of rules are disclosed as being prior real estate deal information. Accordingly, it logically follows that Lyons does not disclose or suggest the claimed defining a rule-based pricing system based on an analysis of the received prior real estate deal information.

Applicant notes that the MSS factors rules provide rules for adjusting the eligibility of a customer. (See Lyons, col. 5, In. 7 - 10) The Lyons compensating factors enables the offeror to override the requirements of a product in an attempt to offer a modified product. As such, Lyons appears to provide a mechanism for overriding the rules established for offering a product. This is in contrast to the claims (e.g., 1, 16, and 19) wherein the rule-based system is validated with additional prior real estate deal information, and a return target for the potential real estate deal is automatically determined by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule-based system.

Applicant also submits that the claimed validating aspect is not disclosed or suggested by Lyons.

The Examiner notes that applicant is arguing: 1) prior real estate deal information is used with rule-based pricing system; and 2) the rule-based system is validated with added prior real estate deal information.

Regarding the first point, the Examiner respectfully points out that Lynch teaches:

"Combined Loan to Value ("CLTV") Ratio. The ratio of the sum of the gross amount of a loan and the gross amounts of all other senior loans secured by the same collateral to the value of the collateral securing the loan. CLTV is commonly expressed as a percentage calculated by dividing the sum of the gross loan amount and the gross amounts of all other senior loans and/or liens secured by the same collateral." (col. 4, lines 5-11) Lynch provides amounts secured by the same collateral, where "secured" is past tense. Therefore Lynch provides prior real estate deal information.

"Further, the ELA reads all its deal structuring level data from the loan origination database the first time it is called. The logic includes, for example, the calculation of the LTV, the DTI, and dynamic generation of advice messages (ELA recommendations)." (col. 7, lines 44-49) ELA means advisor program (col. 6, lines 48-52)

Regarding the second point, Lynch teaches storing prior deal information for their automated deal processing system in order to evaluate future deals:

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies

Art Unit: 3693

implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60) This validates real-estate deals with additional prior real estate information.

Applicant argues other art on page 10:

Applicant further submits that the cited and relied upon Yasuzawa does not correct or otherwise compensate for the failings of Lyons. Additionally, the combination of Lyons, Yasuzawa, and the alleged Official Notice does not render claims 1, 16, and 19 obvious under 35 USC 103(a).

The Examiner respectfully disagrees and maintains the prior 35 USC 103(a) rejection.

Therefore, Applicant respectfully submits that Lynch, Yasuzawa, and the Official Notice fails to disclose or suggest claims 1, 16, and 19, configured as claimed by Applicant. Applicant submits that the cited references also fail to render the dependent claims 2 - 5, 7 - 14, 17, and 18 obvious. Thus, Applicant requests the reconsideration and withdrawal of the rejection under 35 USC 103(a).

The Examiner respectfully maintains the prior rejection.

Claim Objections

4. Claim 16 is objected to because of the following informalities: "...and the validate the rule-base..." should be "and the validated rule based...." Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3693

6. Claims 1-5, 8-9, 12-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,823,319 to Lynch et al., in view of U.S. Pub. No. 2002/0082903 A1 to Yasuzawa and in further view of Official Notice.

Regarding claim 1:

A method of generating return targets for potential real estate deals, comprising:

Lynch et al. discloses:

A deal processing system that can be used for real estate deals...

"The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as greatly reducing the amount of time required to obtain approval of a mortgage loan." (col. 2. lines 25-29);

receiving prior real estate deal information from a prior deal data source;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60)

defining a rule-based pricing system based on an analysis of the received prior real estate deal information;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60) The score provides a rule based on prior real estate deal information.

determining a collateral type associated with a potential real estate deal;

Where the deal processing includes...

"...prompting the customer for information relating to the customer, such as collateral offered by the customer..." (col. 1, lines 61-63);

receiving supplemental deal information associated with the potential real estate deal;

With the ability to receive supplemental deal information associated with the real estate deal...

Art Unit: 3693

"...accessing in real-time information relating to the credit history of the customer..." (col. 1, lines 63-64), where supplemental deal information has been defined in Applicant's specification as not collateral or loan-to-value information.

automatically generating a base return target for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

Provides the ability to evaluate deals using "exclusionary rules"...

"The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring." (col. 5, lines 1-7) The DSS is the "Deal Structure System" and the MSS is the "Mortgage System Software." Also, "The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art." (col. 9, lines 19-21)

identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

"A preferred loan option is generated 336 by selecting from the offeror's available product types those products whose rules are satisfied by the elements stored in the deal structuring record." (col. 9, lines 55-58)

identifying a risk adder associated with the potential real estate deal based on the supplemental deal information;

"Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example." (col. 9, lines 8-13)

validating the rule-based system with additional prior real estate deal information; and

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using the information to validate the rule-based system with prior real estate deal information.

automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule-based system.

“If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors.” (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al., in the business of real estate systems, considers returns from rental income, they do not disclose return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

“For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain.” ¶ [0041]

“Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return.” ¶ [0049]

“It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return).” ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on an internal rate of return, motivated by Yasuzawa, and that the analysis would aid the investor in making educated investment decisions based on capital expenditures, such as for rental property.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI), net income, and loan spread analysis is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns

Art Unit: 3693

using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Regarding claim 2:

The method of claim 1, wherein the potential real estate deal comprises one of: (i) a debt deal, and (ii) an equity deal.

Lynch et al. discloses:

The deal can involve a mortgage, which is a debt deal (col. 2, lines 25-26).

Regarding claim 3:

The method of claim 1, wherein the potential real estate deal comprise a debt deal, said determining further comprises determining loan-to-value information associated with the potential real estate deal, and said generating is further based on the loan-to-value information.

Lynch et al. discloses:

"Forming the record also generates standardized parameters for the deal structuring, such as maximum allowable loan-to-value (LTV) and debt-to-income (DTI) ratios. The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record." (col. 8, lines 54-60)

Regarding claim 4:

The method of claim 1, wherein the potential real estate deal is associated with at least one of: (i) a commercial real estate property, (ii) a commercial real estate portfolio, (iii) a loan, (iv) a mortgage, (v) a commercial mortgage backed security, (vi) a leveraged equity deal, (vii) a full equity purchase, and (viii) an adjustment to an existing real estate deal.

Lynch et al. discloses:

A potential deal can be associated with a mortgage, where..."The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as greatly reducing the amount of time required to obtain approval of a mortgage loan." (col. 2, lines 25-29).

Regarding claim 5:

The method of claim 1, wherein the supplemental deal information comprises at least one of: (i) a risk characteristic, (ii) deal size information, (iii) deal term information, (iv) a number of properties, (v) collateral quality information, (vi) a risk rating, (vii) lockbox information, (viii) sweep trigger information, (ix) rate cap information, (x) customer information, (xi) earn-out information, (xii) subordinated debt information, (xiii) interest reserve information, (xiv) renovation information, (xv) ground lease information, (xvi) portfolio cross-collateralization information, (xvii) credit tenant information, (xviii) annual

Art Unit: 3693

rollover information, (xix) leverage information, (xx) development deal information, and (xi) partnership structure information.

Lynch et al. discloses:

“...applying a plurality of origination rules, such as exclusionary rules, pricing rules, risk rules, and edit preference rules, to the at least one deal parameter and the information relating to the customer...” (col. 1, lines 64-67)

Regarding claim 8:

The method of claim 1, further comprising:

creating the rule-based system in accordance with a statistical analysis of prior real estate deal information.

Lynch et al. discloses:

“...a knowledge base is a collection of rules that represent the human expertise of a particular knowledge domain. Rules are typically constructed in an IF-THEN-ELSE format, e.g., IF Property Type=High Rise AND State=NY THEN Proceed ELSE Flag For Review. The knowledge base is typically stored in a storage medium of a computer.” (col. 3, lines 10-16)

“An expert system operates by running a knowledge base through an inference engine and applying all of the rules to the input data for a given problem.” (col. 3, lines 18-21)

Therefore, it would be inherent for a “collection of rules that represent the human expertise of a particular knowledge domain” to include prior real estate deal information, and that such information could include credit risk history of individuals (col. 1, lines 63-64).

Regarding claim 9:

The method of claim 1, wherein said creating comprises:

creating the rule-based system in accordance with at least one of: (i) risk characteristics and approved return values for a plurality of prior real estate deals, and (ii) expert information.

Lynch et al. discloses:

“In addition, the illustrated DSS system 100 may include at least one third party interface, for third parties such as credit bureaus and third party loan offerors.” (col. 4, lines 57-58)

Regarding claim 12:

The method of claim 1, further comprising:

transmitting an indication of the return target to a deal originator device via a communication network.

Art Unit: 3693

Lynch et al. discloses:

A networked communication system (Fig. 1):

"The computer 102 also has several interchanges, such as interfaces, for communicating with other entities. These interfaces include an internet interface 112 for communicating with customers 114 accessing the DSS 100." (col. 4, lines 40-43)

Regarding claim 13:

The method of claim 12, wherein the deal originator device comprises at least one of: (i) a personal computer, (ii) a portable computing device, and (iii) a telephone device.

Lynch et al. discloses:

"The network computers 118 can be located in a facility operated in conjunction with DSS 100, such that loan customers can access the system without having Internet access. The system also has a telephone interface 120, such that customers can dial into the system to access DSS 100." (col. 4, lines 45-53)

Regarding claim 14:

The method of claim 12, wherein the communication network comprises at least one of: (i) the Internet, (ii) an intranet, (iii) a public network, (iv) a public switched telephone network, (v) a proprietary network, (vi) a wireless network, and (vii) a local area network.

Lynch et al. discloses:

Use of an internet (col. 4, lines 40-43).

Regarding claim 16:

A deal controller, comprising:
a processor; and

Lynch et al. discloses:

A "Deal Structuring System" (Fig. 1, ref. 100) with a processor (Fig. 1, ref. 104);

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

a database (Fig. 1, ref. 110) in communication with a processor, that has memory to store the "Mortgage System Software" (col. 4, lines 27-32);

receive prior real estate deal information from a prior deal data source;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as

Art Unit: 3693

discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60)

define a rule-based pricing system based on an analysis of the received prior real estate deal information.

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60)

determine a collateral type associated with a potential real estate deal,

“The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record. Once the deal structuring record has been completed, exclusionary rules can be iteratively applied 332 to the deal structuring record to determine whether the offering of a product to the customer should be excluded based on the contents of the record.” (col. 8, lines 57-65)

receive supplemental deal information associated with the potential real estate deal,

“The exclusionary rules are discussed hereinabove, and can include exclusions based on... the credit history of the borrower, for example” (col. 8, lines 65-67 and col. 9, line 1), where supplemental deal information has been defined in Applicant’s specification as not collateral or loan-to-value information.

automatically generate a base return target for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

And provides the ability to evaluate deals using “exclusionary rules”...

“The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring.” (col. 5, lines 1-7) The DSS is the “Deal Structure System” and the MSS is the “Mortgage System Software.” Also, “The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art.” (col. 9, lines 19-21)

Art Unit: 3693

identify a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

"A preferred loan option is generated 336 by selecting from the offeror's available product types those products whose rules are satisfied by the elements stored in the deal structuring record." (col. 9, lines 55-58)

identify a risk adder associated with the potential real estate deal based on the supplemental deal information;

"Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example." (col. 9, lines 8-13)

validate the rule-based system with additional prior real estate deal information; and

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using information to validate the rule-based system with prior real estate deal information.

automatically determine a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified and risk adder, and the validate the rule-based system.

"If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors." (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al. discloses a real estate system and considers returns from rental income, for example, they do not disclose a return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

"For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain." ¶ [0041]

Art Unit: 3693

"Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return." ¶ [0049]

"It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return)." ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on internal rate of return, motivated by Yasuzawa, and that analysis would apply financial principals for making investment decisions based n capital expenditures, such as for rental property.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI), net income, and loan spread analysis is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Regarding claim 17:

The deal controller of claim 16, wherein said storage device further stores at least one of: (i) a prior deal database, and (ii) a potential deal database.

Lynch et al. discloses:

A deal processing system that can be used for real estate deals...

"The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as greatly reducing the amount of time required to obtain approval of a mortgage loan." (col. 2. lines 25-29).

"The memory is also used to store data regarding each deal structuring. This information can be stored in a database 110 within the memory 106." (col. 4, lines 35-37)

Therefore, the deal processing system is able to perform analysis on "potential deals," where the deal structuring information can be stored on a database.

Art Unit: 3693

Regarding claim 18:

The deal controller of claim 16, wherein said processor is further coupled to a communication device adapted to communicate with at least one of: (i) a deal originator device, and (ii) another deal controller.

Lynch et al. discloses:

"The computer 102 also has several interchanges, such as interfaces, for communicating with other entities. These interfaces include an internet interface 112 for communicating with customers 114 accessing the DSS 100." (col. 4, lines 40-43). Therefore, the processor is coupled to a communication device to communicate with a deal originator device (Fig. 1, ref. 104 and 114).

Regarding claim 19

(Currently Amended) A medium storing instructions adapted to be executed by a processor to perform a method of generating return targets for potential real estate deals, said method comprising:

Lynch et al. discloses:

"Alternatively, MSS 108 may be stored on a removable computer readable medium, such as a CD-ROM (not shown)." (col. 4, lines 32-34)

receiving prior real estate deal information from a prior deal data source;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60)

defining a rule-based pricing system based on an analysis of the received prior real estate deal information;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60)

determining a collateral type associated with a potential real estate deal;

"The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record. Once the deal

Art Unit: 3693

structuring record has been completed, exclusionary rules can be iteratively applied 332 to the deal structuring record to determine whether the offering of a product to the customer should be excluded based on the contents of the record.” (col. 8, lines 57-65)

receiving supplemental deal information associated with the potential real estate deal;

“The exclusionary rules are discussed hereinabove, and can include exclusions based on... the credit history of the borrower, for example.” (col. 8, lines 65-67 and col. 9, line 1), where supplemental deal information has been defined in Applicant’s specification as not collateral or loan-to-value information.

automatically generating a base return target for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

Provides the ability to evaluate deals using “exclusionary rules”... “The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring.” (col. 5, lines 1-7) The DSS is the “Deal Structure System” and the MSS is the “Mortgage System Software.” Also, “The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art.” (col. 9, lines 19-21)

identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

“A preferred loan option is generated 336 by selecting from the offeror’s available product types those products whose rules are satisfied by the elements stored in the deal structuring record.” (col. 9, lines 55-58)

identifying a risk adder associated with the potential real estate deal based on the supplemental deal information;

“Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example.” (col. 9, lines 8-13)

validating the rule-based system with additional prior real estate deal information; and

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies

implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using information to validate the rule-based system with prior real estate deal information.

automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant and risk, and the rule-based system.

“If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors.” (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al. discloses a real estate system and considers returns from rental income, for example, they do not disclose a return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

“For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain.” ¶ [0041]

“Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return.” ¶ [0049]

“It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return).” ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on internal rate of return, motivated by Yasuzawa, and that analysis would apply financial principals for making investment decisions based on capital expenditures, such as for rental property.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI), net income, and loan spread analysis is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 7,310,618 Libman

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth L. Bartley whose telephone number is (571)

Art Unit: 3693

272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAGDISH N PATEL/

Primary Examiner, Art Unit 3693